



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/932,866	08/17/2001	Gerard Chauvel	TI-31347 6569		
23494	23494 . 7590 05/20/2004			EXAMINER	
TEXAS INSTRUMENTS INCORPORATED			KIM, HONG CHONG		
P O BOX 655474, M/S 3999 DALLAS, TX 75265			ART UNIT	PAPER NUMBER	
			2186	a	
			DATE MAILED: 05/20/2004	<b>-</b>	

Please find below and/or attached an Office communication concerning this application or proceeding.

	_	7G			
	Application No.	Applicant(s)			
Office Action Commons	09/932,866	CHAUVEL ET AL.			
Office Action Summary	Examiner	Art Unit			
	Hong C Kim	2186			
The MAILING DATE of this communication app Period for Reply	oears on the cover sheet with the	e correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).  Status	136(a). In no event, however, may a reply be ly within the statutory minimum of thirty (30) dwill apply and will expire SIX (6) MONTHS from the cause the application to become ABANDON	timely filed lays will be considered timely. om the mailing date of this communication. NED (35 U.S.C. § 133).			
1) Responsive to communication(s) filed on 3/11.	<u>/04</u> .				
2a) This action is <b>FINAL</b> . 2b) ⊠ This	action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
<ul> <li>4)  Claim(s) 1-16 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) 8-11 is/are allowed.</li> <li>6)  Claim(s) 1, 2, 6 and 7 is/are rejected.</li> <li>7)  Claim(s) 3-5 and 12-16 is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>					
Application Papers	•				
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomplicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.	epted or b) objected to by the drawing(s) be held in abeyance. So tion is required if the drawing(s) is consistent or the drawing(s) is consistent or the drawing(s) is consistent or the drawing(s).	See 37 CFR 1.85(a). Objected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. §§ 119 and 120	•				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of: <ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> <li>Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ol> </li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> <li>13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. <ol> <li>The translation of the foreign language provisional application has been received.</li> </ol> </li> <li>14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure.Statement(s) (PTO-1449) Paper No(s)	5) 🔲 Notice of Informa	ry (PTO-413) Paper No(s) I Patent Application (PTO-152)			

Application/Control Number: 09/932,866 Page -1-Art Unit: 2186 Paper No.9

#### **Detailed Action**

1. Claims 1-16 are presented for examination. This office action is in response to the amendment filed on 03/11/04.

2. Applicants are reminded of the duty to disclose information under 37 CFR 1.56.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Sherrod US Patent No. 4,642,756.

As to claim 1, Sherrod discloses a method for prioritizing access to a shared resource in a digital having a plurality of devices vying for access to the shared resource (abstract), comprising the steps of: initiating an access request by each of the plurality of devices (Fig. 2 Ref. 1 and Ref. 2); providing two priority values (col.4 lines 31-37) along with each access request from each device; and arbitrating for access to the shared device by using the higher of priority value from each device (col. 5 lines 33-52).

As to claim 7, Sherrod discloses a digital system (abstract) comprising: a shared resource (abstract); a plurality of devices (Fig. 2 Ref. 1 and Ref. 2) connected to access the shared resource, wherein each device has a request output and circuitry for providing two separate variable priority values (col.4 lines 31-37); arbitration circuitry (col. 5 lines 33-52).

## Claim Rejections - 35 USC ' 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-2, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lim US Patent No. 6,430,640 in view of Cutts, Jr. et al. (Cutts) US Patent No. 5,588,111.

As to claim 1, Lim discloses a method for prioritizing access to a shared resource in a digital having a plurality of devices vying for access to the shared resource (abstract), comprising the steps of: initiating an access request by each of the plurality of devices (col. 4 lines 1-5); providing priority value (col. 4 lines 9-10) along with each access request from each device; and arbitrating for access to the shared device by

using the higher of priority value from each device (abstract and col. 13 lines 1-12), however, Lim does not specifically disclose two priority values.

Cutts discloses two priority values (PID and VPN, Fig. 20) and using the higher of priority values from each device (PID reads on this limitation since if the PID does not match the access is denied) for the purpose of providing higher reliability than a single priority value.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate two priority values as shown in Cutts into the invention of Lim for the advantages stated above.

As to claim 2, Lim further discloses wherein the step of providing two priority values comprises the steps of; establishing a software priority state associated with a program module; executing an instruction from the program module; and providing an access priority value with the access request that is responsive to the software priority state of the program module (col. 13 lines 39-42 and col. 15 lines 8-29, arbitration units 404 can be implemented using hardware, software, or a combination thereof and priorities can be assigned and updated on the fly read on this limitation).

As to claim 6, Lim discloses the step of wherein another device vying for access to the shared resource provides one or the other but not both of the two priority values (abstract and col. 13 lines 1-12).

Application/Control Number: 09/932,866 Page -4-Art Unit: 2186 Paper No.7

As to claim 7, Lim discloses a digital system (abstract) comprising: a shared resource (abstract); a plurality of devices (col. 4 lines 1-5) connected to access the shared resource, wherein each device has a request output and circuitry for providing separate variable priority value (col. 4 lines 1-10); arbitration circuitry (abstract and col. 13 lines 1-12), however, Lim does not specifically disclose two separate variable priority values.

Cutts discloses two separate variable priority values (PID and VPN, Fig. 20) for the purpose of providing higher reliability than a single priority value.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate two separate variable priority values as shown in Cutts into the invention of Lim for the advantages stated above.

### Allowable Subject Matter

- 5. Claims 3-5, 12-13, 14-15 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 6. Claims 8-11 are allowed.

#### Response to Amendment

7. Applicant's arguments filed on 3/11/04 have been fully considered but they are

not persuasive.

Applicant's argument on page 7 that the reference does not disclose two priority values is not considered persuasive.

Sherrod discloses two separate variable priority values (col.4 lines 31-37). Cutts also discloses two priority values (PID and VPN, Fig. 20).

Therefore broadly written claims are disclosed by the references cited.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached PTO-892.

A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) days from the mail date of this letter. Failure to respond within the period for response will result in **ABANDONMENT** of the application (see 35 USC 133, MPEP 710.02, 710.02(b)).

When responding to the office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections. See 37 C.F.R. ' 1.111(c).

Application/Control Number: 09/932,866

Art Unit: 2186

Page -6-Paper No.7

When responding to the office action, Applicants are advised to provide the examiner

with the line numbers and page numbers in the application and/or references cited to

assist examiner to locate the appropriate paragraphs.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Hong C Kim whose telephone number is 703-305-3835.

The examiner can normally be reached on M-F 9:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Matt M Kim can be reached on (703) 305-3821. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application should

be directed to the Group receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to TC-2100: 703-872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Primary Patent Examiner** 

May 14, 2004